

ABSTRACT

The invention relates to an arrangement having A motor structure resistant to liquid intrusion features two modules, the first having an electronically commutated external-rotor motor (20), which motor comprises an internal stator (22) that is arranged on a bearing tube (30) and is separated by a first air gap (24) from an external rotor (26; 92), which latter comprises a rotor cup (40) that is open at one end and is joined at its other end to a shaft (46) that is journaled in the bearing tube (30), further having a permanent-magnet arrangement (76), arranged at the open end of the rotor cup (40), for magnetic interaction with a second permanent-magnet rotor (92), forming part of the second module. rotatably journaled in the arrangement, which permanent-magnet arrangement (76) The first module is separated from that second rotor (92) by a second air gap and forms therewith a magnetic coupling (94), so that a rotation of the permanent-magnet arrangement (76) brings about a rotation of that second rotor (92). , and having A hermetic separation of the two modules is accomplished using a non-ferromagnetic separating element (82) arranged in the second air gap. The second module can safely be used to handle liquid, e.g. as a pump, which element separates the second rotor (92) in liquid-tight fashion from the external-rotor motor (20), and on which element are arranged an arrangement (106) for journailling the second rotor (92), as well as the bearing tube (30) for journailling the shaft (46) of the rotor cup (40).